### **REMARKS**

The foregoing amendments and the following remarks are submitted in response to the communication dated May 13, 2009.

## Status of the Claims

Claims 1-19 are pending in the application. Claims 5-18, which are withdrawn from consideration, have been canceled without prejudice. Claims 1 and 7 have been amended in order to more particularly point out and distinctly claim that which Applicants regard as the invention. Support for the amended claims can be found generally through Applicants' specification. In particular, support for the amendments to claims 1 and 7 which now states an antigen of interest "at a concentration of 1µM to 1pM" can be found throughout the specification including for example at page 7, line 1 and 2, of the published PCT application.

With respect to all amendments and canceled claims, Applicant has not dedicated or abandoned any unclaimed subject matter and, moreover, has not acquiesced to any rejections and/or objections made by the Patent Office. Applicant reserves the right to pursue prosecution of any presently excluded claim embodiments in future continuation and/or divisional applications. No new matter is added by the amendment of the claims.

# Claim Rejections - 35 USC § 102

The Examiner has rejected claims 1, 3 and 6 under 35 USC 102(b) as being anticipated by Irsch et al (5,786,161, cited on PTO 1449). The Examiner alleges that Irsch et al teach a method of isolating B-cells which produce an antibody which recognizes an allergen/antigen, wherein the Irsch method anticipates claim 1. The Examiner alleges that in the Irsch et al method, a population of B-cells is contacted with an allergen coupled to a hapten, these incubated so that allergen can bind to cell surface bound antibody/immunoglobulin, and the thus incubated cells are then contacted with avidin coated magnetic beads to which a biotinylated anti-hapten antibody has been complexed. This second binding step is noted as forming a sandwich complex of B-cells---hapten-antigen---biotinylated-antibodies-avidin-beads.

Applicants respectfully traverse this rejection. Applicants submit and argue that Irsch et al does not describe, anticipate or suggest the invention of claims 1, 3 and 6. Anticipation is a question of fact. To anticipate a claim, a prior art reference must teach or suggest each and every limitation of the claim. Applicants have above amended independent claim 1, without acquiescing to the Examiner and without prejudice to further or future prosecution. Applicants respectfully submit that Irsch et al does not anticipate claims 1, 3 and 6, because the reference fails to disclose or suggest all elements of claims 1, 3 and 6, including as amended. In particular, amended claim 1 recites that the method brings into contact an antigen of interest at a concentration of 1µM to 1pM. The recited method, including the particular concentration of antigen is not taught, or even suggested, by Irsch et al. Applicants submit that one of skill in the art would not have expected the method to work with such a low concentration of antigen. In fact, it would be (and is) natural to use a large excess of antigen. Applicants submit that Irsch et al does not teach or anticipate the instant claims 1, 3 and 6.

In view of the foregoing amendments and remarks, Applicants submit that the Examiner's rejection under 35 USC 102 is obviated and hereby request it be withdrawn.

### Rejections Under 35 U.S.C. § 103

The Examiner has rejected claims 7 and 19 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Irsch et al. (5,786,161, cited on PTO 1449), noted above, alone or in view of Steenbakkers (EP 0,448,470, A1, Cited on PTO-892). Irsch et al., is cited above for showing the steps of claim 1, however, the Examiner admits, Irsch does not point out all the steps involved in production of antibodies from the immortalized cells. Steenbakkers, however, is cited as teaching one how to isolate individual B-cell or a population of B-cells that produce an antibody that recognizes an antigen, including the use of magnetic/paramagnetic beads. The Examiner argues that the further steps of culturing, screening, and isolating an antibody from the B-cells selected by the method of Irsch et al would have been obvious to one of skill in the art. Applicants respectfully traverse this rejection. To establish a prima facie case of obviousness, the prior art references must teach or suggest all the claim limitations. Irsch et al, alone or in

combination with Steenbakkers does not render claims 7 and 19 obvious. Applicants point out that independent claim 7 has been above amended, without acquiescing to the Examiner and without prejudice to further or future prosecution. In particular, amended claim 7 recites that the method brings into contact an antigen of interest at a concentration of 1µM to 1pM. The method of Irsch et al, as argued above, does not anticipate, and does not teach or suggest, the elements of the method, and particularly the low concentration of antigen, as presently claimed. Applicants again submit that one of skill in the art would not have expected the method to work with such a low concentration of antigen. In fact, it would be (and is) natural to use a large excess of antigen in any such method. Further, Steenbakkers does not add anything to Irsch in this particular regard, and thus, the combination of Irsch et al. and Steenbakkers do not teach or suggest all elements of instant claims 7 and/or 19. Claims 7 and 19 are not anticipated by Irsch et al or made obvious by the combination of Irsch et al and Steenbakkers.

Claims 1, 3-4 and 6 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Irsch et al. (5,786,161, cited on PTO 1449), noted above, in view of Brown et al (WO 2004/051268, Cited in IDS of 6/5/06). Irsch et al. is cited above for showing a method in which the "antigen of interest" carries a hapten and in which the particle bears an anti-hapten antibody. Brown et al is cited as showing a method in which one, likewise, forms a complex in which antigen recognized by an antibody becomes indirectly bound to a particle and this antigen bearing particle is employed in a method of binding antigen-specific B-cells. The Examiner alleges it would have been obvious to use particles with antigen indirectly coupled via antigen-anti-antigen binding (as in Brown et al) in the cell B-cell isolation method of Irsch et al. Applicants respectfully traverse this rejection. To establish a prima facie case of obviousness, the prior art references must teach or suggest all the claim limitations. Irsch et al alone or in combination with Brown et al does not render claims 1, 3-4 and 6 obvious. Applicants point out that independent claim 1 has been above amended, without acquiescing to the Examiner and without prejudice to further or future prosecution. In particular, amended claim 1 recites that the method brings into contact an antigen of interest at a concentration of 1 µM to 1 pM. The method

of Irsch et al, as argued above, does not anticipate, and does not teach or suggest, the elements of the method, and particularly the low concentration of antigen, as presently claimed. Applicants again submit that one of skill in the art would not have expected the method to work with such a low concentration of antigen. In fact, it would be (and is) natural to use a large excess of antigen in any such method. Further, Brown et al does not add anything to Irsch in this particular regard, and thus, the combination of Irsch et al. and Brown et al do not teach or suggest all elements of instant claims 1, 3-4 and/or 6. Claims 1, 3-4 and 6 are not made obvious by the combination of Irsch et al and Brown et al.

Claims 7 and 19 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Irsch et al. (5,786,161, cited on PTO 1449), noted above, in view of Brown et al (WO 2004/051268, Cited in IDS of 6/5/06), noted above, and further in view of Steenbakkers (EP 0,448,470, A1, Cited on PTO-892), also noted above. Irsch et al and Brown et al were cited by the Examiner as noted above for allegedly showing that the steps of claim 1 would have been obvious. Steenbakkers teaches that one can isolate individual B-cell or a population of B-cells that produce an antibody that recognize an antigen and then, further, that one can culture, immortalize, further culture, and use the cells to produce antibodies. Applicants respectfully traverse this rejection. To establish a prima facie case of obviousness, the prior art references must teach or suggest all the claim limitations. Irsch et al, alone or in combination with Brown et al does not render the method of the instant claims obvious. Applicants point out that independent claim 7 has been above amended, without acquiescing to the Examiner and without prejudice to further or future prosecution. In particular, amended claim 7 recites that the method brings into contact an antigen of interest at a concentration of 1µM to 1pM. The method of Irsch et al, as argued above, does not anticipate, and does not teach or suggest, the elements of the method, and particularly the low concentration of antigen, as presently claimed. Applicants again submit that one of skill in the art would not have expected the method to work with such a low concentration of antigen. In fact, it would be (and is) natural to use a large excess of antigen in any such method. Further, neither Brown et al nor Steenbakkers, alone or in combination,

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does not add anything to Irsch in this particular regard, and thus, the combination of Irsch et al. with Brown et al, further with Steenbakkers does not teach or suggest all elements of instant claims 7 and/or 19. Claims 7 and 19 are not made obvious by the combination of Irsch et al with Brown et al and further with Steenbakkers.

In view of the foregoing amendments and remarks, Applicants submit that the Examiner's rejections under 35 USC 103 are obviated and hereby request they be withdrawn.

#### **CONCLUSION**

Applicants respectfully request entry of the foregoing amendments and remarks in the file history of the instant Application. The Claims as amended are believed to be in condition for allowance, and reconsideration and withdrawal of all of the outstanding rejections is therefore believed in order. Early and favorable action on the claims is earnestly solicited.

Respectfully submitted,

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